

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended) A titanium oxide-organic polymer composite material for artificial bone obtained by the steps comprising:  
forming titania gel on the surface of said a base material by titania solution treatment to dip into a solution of 0° C to 50° C temperature for from several seconds to 1 week, said titania solution obtained by adding a solution consisting of acidic alcohol and water into alcohol solution of titaniumtetraaleoxide titaniumtetraalkoxide to a said base material composed of a polymer compound selected from a group consisting of polyolefin, polyester and nylon, and modifying to a titanium oxide membrane which forms apatite having similar Ca/P atom ratio to an apatite of mammalian's bone in supersaturated aqueous solution to apatite or from a body fluid of mammalian by dipping said base material on the surface of which titania gel is formed into hot water of 50° C to 95° C or solution of room temperature to 95° C to which acid is added.

2. (currently amended) The titanium oxide-organic polymer composite material for artificial bone of claim 1, wherein titaniumtetraaleoxide titaniumtetraalkoxide is tetraisopropyltitanate, alcohol is ethanol and acid is inorganic acid.

3. (previously presented) The titanium oxide-organic polymer composite material for artificial bone of claim 1, wherein polyolefin is low-density polyethylene, polyester is polyethyleneterephthalate and nylon is 6-nylon.

4. (currently amended) The titanium oxide-organic polymer composite material for artificial bone according to claim 1, wherein the solution for titania solution treatment is prepared by dipping a solution composed of acidic alcohol and water to a solution of titaniumtetraaleoxide titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to 10° C.

5. (currently amended) A composite for artificial bone prepared by the steps comprising:  
obtaining a titanium oxide-organic polymer composite material for artificial bone obtained by forming titania gel on the surface of said base material by titania solution treatment characterizing dipping into a solution of 0° C to 10° C temperature for from several seconds to 1 week, said titania solution obtained by adding a solution consisting of acidic alcohol and water into alcohol solution of titaniumtetraaleoxide titaniumtetraalkoxide to a base material composed of a polymer compound selected from a group consisting of polyolefin, polyester and nylon, and modifying to a titanium oxide membrane which forms apatite having similar Ca/P atom ratio to an apatite of mammalian's bone in supersaturated aqueous solution to apatite or from a

body fluid of mammalian by dipping said base material on the surface of which titania gel is formed into hot water of 50° C to 95° C or solution of room temperature to 95° C to which acid is added, then forming an apatite by dipping said composite into supersaturated aqueous solution to apatite.

6. (currently amended) The composite material for artificial bone of claim 5, wherein ~~titaniumtetraalcooxide~~ titaniumtetraalkoxide is tetraisopropyltitanate, alcohol is ethanol and acid is inorganic acid.

7. (previously presented) The composite material for artificial bone of claim 5, wherein titanium oxide-organic polymer for artificial bone is obtained by using low-density polyethylene as polyolefin, polyethyleneterephthalate as polyester and 6-nylon as nylon.

8. (currently amended) The titanium oxide-organic polymer composite material for artificial bone according to claim 5, wherein the solution for titania solution treatment is prepared by dipping a solution composed of acidic alcohol and water to a solution of ~~titaniumtetraalcooxide~~ titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to 10° C.

9. (previously presented) The titanium oxide-organic polymer composite

material for artificial bone of claim 2, wherein polyolefin is low-density polyethylene, polyester is polyethyleneterephthalate and nylon is 6-nylon.

10. (currently amended) The titanium oxide-organic polymer composite material for artificial bone according to claim 2, wherein the solution for titania solution treatment is prepared by dipping a solution composed of acidic alcohol and water to a solution of ~~titaniumtetraalcooxide~~ titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to 10° C.

11. (currently amended) The titanium oxide-organic polymer composite material for artificial bone according to claim 3, wherein the solution for titania solution treatment is prepared by dipping a solution composed of acidic alcohol and water to a solution of ~~titaniumtetraalcooxide~~ titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to 10° C.

12. (currently amended) The titanium oxide-organic polymer composite material for artificial bone according to claim 9, wherein the solution for titania solution treatment is prepared by dipping a solution composed of acidic alcohol and water to a solution of ~~titaniumtetraalcooxide~~ titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to 10° C.

13. (previously presented) The composite material for artificial bone of claim 6, wherein titanium oxide-organic polymer for artificial bone is obtained by using low-density polyethylene as polyolefin, polyethyleneterephthalate as polyester and 6-nylon as nylon.

14. (currently amended) The titanium oxide-organic polymer composite material for artificial bone according to claim 6, wherein the solution for titania solution treatment is prepared by dipping a solution composed of acidic alcohol and water to a solution of ~~titaniumtetraaleoxide~~ titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to 10° C.

15. (currently amended) The titanium oxide-organic polymer composite material for artificial bone according to claim 7, wherein the solution for titania solution treatment is prepared by dipping a solution composed of acidic alcohol and water to a solution of ~~titaniumtetraaleoxide~~ titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to 10° C.

16. (currently amended) The titanium oxide-organic polymer composite material for artificial bone according to claim 13, wherein the solution for titania solution treatment is prepared by dipping a solution composed of acidic alcohol and water to a solution of ~~titaniumtetraaleoxide~~ titaniumtetraalkoxide and alcohol maintaining the temperature to 0° C to

Response to Office Action of 4/07/08

Atty Docket No: TAN-357

KOKUBO *et al.*

10° C.